



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/576,441

06/01/2006

Robert Lohr

METPAT P80AUS

2421

20210 7590 12/17/2008  
DAVIS & BUJOLD, P.L.L.C.  
112 PLEASANT STREET  
CONCORD, NH 03301

EXAMINER

VENNE, DANIEL V

ART UNIT

PAPER NUMBER

3617

MAIL DATE

DELIVERY MODE

12/17/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/576,441	<b>Applicant(s)</b> LOHR ET AL.	
	<b>Examiner</b> DANIEL V. VENNE	<b>Art Unit</b> 3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 26-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

1. An amendment was received from applicant on 11/10/2008.
2. Claims 1-25 are canceled.
3. Claims 26-36, 39 and 40 are amended.

***Claim Objections***

4. Claims are objected to because of the following informalities:

On line 9 of claim 26, "and supports" should be -- supports --.

On line 3 of claim 45, "collection device" should be -- collection devices --.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 26-29, 35-38, 42, 46 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cogifer (FR 2708245), cited by applicant, in view of Gover (US 1103761). Cogifer discloses a plurality of lane sections for a travel lane for a vehicle on tires, the lane section comprises a framework formed of two laterally profiled [403, 404] caissons having a rectangular cross-section, a flat base (bottom), an exterior wall (outboard side), an interior wall (inboard side) at least partially supports the tires of the vehicle since the wall partially supports the top which supports tires of a vehicle, an approximately flat band (can be considered the top part of the caisson) serving as a

Art Unit: 3617

rolling track for the tires of the vehicle, the caissons substantially parallel to one another and interconnected by tie plate lacings [405] which support a rail [300] for guiding the vehicle (see Fig. 10). The guide rail [300] is affixed to the tie plate lacings [405] at a mid-level by a support assembly (fasteners with clip like retaining pieces as shown in Figs. 8 and 9) resting on a longitudinal support plate [402]. Fig. 8 shows a trench. A support assembly (shown in Fig. 8) is supported on a longitudinal support plate [402] and affixes the guide rail [300] to tie plate lacings [405] essentially midway between the two caissons [403, 404]. It does not appear that Cogifer discloses that the caissons are hollow. Gover discloses caissons [3] (box frame structure) that are hollow with the base [7], exterior and interior walls [8] and flat band track [9] structure recited forming the hollow caisson and defining a protected interior space (see Fig. 1), the interior wall at least partially supports the top of the structure which at least partially supports a vehicle; the caissons are simple to construct, inexpensive to manufacture, and arranged such that sections may be removed without disturbing the remainder of the track (see col. 1, lines 31-36). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to make the caissons of Cogifer hollow with the recited wall, flat band track and interior space features as disclosed by Gover to create the invention as claimed by applicant. The rationale would have been to provide an inexpensive and simple to construct caisson that could be removed without disturbing the remainder of the track, and that would provide the expected results facilitating construction. Such a hollow caisson would define a passage or housing. The phrases following "for ..." in claims 27-29 are

Art Unit: 3617

considered an intended use limitations which carry no significant patentable weight in the claims. The caissons have orifices where longitudinal fastenings penetrate through, see Figs. 8 and 10. Such orifices can be considered capable of water drainage; although the phrase "water drainage" in front of "orifices" can be considered an intended use limitation for 'orifices' which can be considered to carry no significant patentable weight. The exterior lateral wall (outboard side) of the caisson can be considered inclined at least slightly in so far as inclined can be considered not exactly vertical within limits of tolerances, and applicant has not indicated any degree of inclination nor recited 'substantially inclined'.

13. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cogifer (FR 2708245), cited by applicant, in view of Gover, and further in view of Jones et al. Cogifer in view of Gover discloses all claimed features, as indicated above, with the exception of the band on the rolling track is formed by a succession of linear plates connected in a removable manner to the caissons to facilitate access to an interior space of the caissons, as recited. Jones et al. discloses a succession of linear plates [27] connected in removable fashion for attaining access to a channel [34]. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide a succession of linear plates connected in removable fashion for attaining access to a hollow caisson to create the invention as claimed by applicant. The rationale would have been to provide a known means in a predictable fashion in order to provide the expected results of providing access to the hollow caisson.

Art Unit: 3617

14. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cogifer (FR 2708245), cited by applicant, in view of Gover, and further in view of Lundman (US 4421300). Cogifer in view of Gover discloses all claimed features, as indicated above, with the exception of the upper surface of the band of the rolling track having adhesion ribs, as recited. Lundman discloses adhesion ribs [44] on a track surface [38].

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide adhesion ribs to the surface of the band of the rolling track in order enhance the traction surface of the rolling track for vehicle tires. The rationale would have been to utilize a known means in a predictable fashion in order to provide the expected result of enhancing traction for the vehicle tires on the rolling track.

15. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cogifer (FR 2708245), cited by applicant, in view of Gover, and further in view of Ruder et al. (US 5067867). Cogifer in view of Gover discloses all claimed features, as indicated above, with the exception of sound insulation material affixed (attached or connected) to the caisson and located between the band track and the caisson, as recited. Ruder et al. discloses sound insulation material [55] between track pad [54] and track tie [53], see Fig. 10; the particular placement of the insulation can be considered a matter of design choice depending on the insulation qualities desired. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide sound insulation material as recited in order to minimize vibration or sound for the rolling track. Such an improvement could

Art Unit: 3617

be considered to enhance the vibration and sound deadening properties for the rolling track. The rationale would have been to utilize a known means to provide the expected result of enhancing the vibration and sound insulating properties for the rolling track.

16. Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cogifer (FR 2708245), cited by applicant, in view of Gover, and further in view of Mayne (US 2589193). Cogifer in view of Gover discloses all claimed features, as indicated above, with the exception of at least one transverse partitioning plate within an interior space formed by the caissons and the transverse partitioning plate having housing cut-outs, as recited. Mayne discloses a baffle plate [5] having housing cut-outs (lightening holes) [17] in a hollow wing structure, see Figs 2 and 4. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide transverse partition plates with housing cut-outs in order to strengthen the hollow caissons and provide lightening holes in the transverse plate structure. The rationale would have been to utilize a known means in a predictable fashion to provide the expected result of optimizing strength and weight characteristics for the caissons. Such housing cut-outs would provide a passage capable of local support of cables.

17. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cogifer (FR 2708245), cited by applicant, in view of Gover, and further in view of Koster et al. (US 4968178). Cogifer in view of Gover discloses all claimed features, as indicated above, with the exception of the plurality of modular lane sections immobilized by bands of resin cast longitudinally along the ground. Koster et al. discloses a band of resin [24]

Art Unit: 3617

cast in a longitudinal gap between roadway structures which at least partially restrains the structures, see Fig. 1. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide bands of resin to restrain or immobilize the modular lane sections in order to strengthen the adherence of the lane sections to a ground surface. The rationale would have been to utilize a known means to provide the expected result of immobilizing lane sections on a ground surface.

18. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cogifer (FR 2708245), cited by applicant, in view of Gover, and further in view of Emmons (US 1731301). Cogifer in view of Gover discloses all claimed features, as indicated above, with the exception of an intermediate free space between the two bands of the rolling tracks being filled with an appropriate fill and a top surface of the fill is finished by one of a decorative and technical coating in the form of plates. An 'appropriate fill' as recited can be considered any type of fill since applicant has not recited any specific type or kind of fill. The 'top surface of the fill being of a decorative coating in the form of plates' can be considered any metal, concrete, asphalt for tile covering since all of these materials can be considered decorative and generally in the form of plates, as so generally recited by applicant. Emmons discloses a fill [4] between rolling tracks (rails) [3] and a top surface in the form of plates [6]. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide a fill with a coating in the form of plates to create the invention as claimed by applicant. The rationale would have been to utilize a known



Art Unit: 3617

means to provide the expected result of enhancing construction and decorative properties of the lane sections.

19. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cogifer (FR 2708245), cited by applicant, in view of Gover. Cogifer in view of Gover discloses all claimed features, as indicated above, with the exception of explicitly disclosing that at least one of the plurality of modular lane sections is a curved element, as recited.

Applicant has not indicated a degree of curvature and the modular lane sections of Cogifer can be considered curved in as much as the sections can be considered not exactly straight within tolerances in the design. In addition, curved tracks are known in the art. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide curved lane sections to accommodate curved pathways in the transportation system. The rationale would have been to utilize a known means to provide the expected result of providing curved track to accommodate curved portions in the transportation system.

20. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cogifer (FR 2708245), cited by applicant, in view of Gover, and further in view of Reichel et al. (2004/0182946). Cogifer in view of Gover discloses all claimed features, as indicated above, with the exception of explicitly disclosing that at least one of the plurality of modular lane sections is trapezoidal in shape which enables turning, as recited. Reichel et al. discloses a trapezoidal shape for support in a modular lane sections for rail bed. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide such a

Art Unit: 3617

lane section with a trapezoidal shape as a matter of design choice to enhance the support strength and performance characteristics of the lane section. The rationale would have been to utilize a known means to provide the expected result of enhancing the support strength for modular lane sections with a trapezoidal shaped design for the sections.

21. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cogifer (FR 2708245), cited by applicant, in view of Gover, and further in view of applicant's own specification. Cogifer in view of Gover discloses all claimed features, as indicated above, with the exception of explicitly disclosing that at least one of the plurality of modular lane sections is inclined in the shape of a circumflex accent, as recited.

Applicant's specification (last paragraph), indicates the following: "One could equally envisage the realization of a lane which, viewed in cross-section, would be inclined like a "circumflex accent" in the manner of many roadways, which would improve the runoff of rainwater on the sides and limit the formation of glaze ice." Therefore, such a 'circumflex accent' design is known as admitted prior art for roadways and it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide such a lane section with the Cogifer system.

22. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cogifer (FR 2708245), cited by applicant, in view of Gover, and further in view of Gemmer (US 916295). Cogifer in view of Gover discloses all claimed features, as indicated above, with the exception of explicitly disclosing that the exterior lateral wall of at least one of

Art Unit: 3617

the caissons is substantially inclined with respect to the base and the flat band track such that one of the base and the flat band track is wider than an other of the base and the flat band track, as recited. Gemmer discloses (in Figs. 1-6) inclined side walls 3 of a hollow rail support over a base (not shown which would be the track bed or underlying support structure). Therefore, it would have been obvious to one of ordinary skill in the art to which the subject matter pertains to make the side walls of Cogifer in view of Gover inclined as disclosed by Gemmer that would provide the exterior lateral wall of at least one of the caissons inclined with respect to the base and the flat band track such that one of the base and the flat band track is wider than an other of the base and the flat band track, as recited. The rationale would have been to utilize a known side wall incline that would provide a wider base for the track structure for strength and stability; since the amount of incline is not specified by the applicant, the amount of incline for the side wall may be considered a matter of engineering design choice.

#### ***Allowable Subject Matter***

23. Claims 41, 44 and 45 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

24. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel V. Venne whose telephone number is (571) 272-7947. The examiner can normally be reached between 7:30AM - 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 3617

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. Joseph Morano/

Supervisory Patent Examiner, Art Unit 3617

DVV